

#3

OIPE

RAW SEQUENCE LISTING

DATE: 09/13/2001

PATENT APPLICATION: US/09/842,930A

TIME: 11:15:11

Input Set : A:\sequence listing.txt

Output Set: N:\CRF3\09132001\I842930A.raw

3 <110> APPLICANT: Weigel, Paul
 5 <120> TITLE OF INVENTION: Identification of Hyaluronan Receptor for Endocytosis
 7 <130> FILE REFERENCE: 5820.603
 9 <140> CURRENT APPLICATION NUMBER: 09/842,930A
 C--> 10 <141> CURRENT FILING DATE: 2001-04-22
 12 <150> PRIOR APPLICATION NUMBER: 60/245,320
 13 <151> PRIOR FILING DATE: 2000-11-02
 15 <150> PRIOR APPLICATION NUMBER: 60/199,538
 16 <151> PRIOR FILING DATE: 2000-04-25
 18 <160> NUMBER OF SEQ ID NOS: 56
 20 <170> SOFTWARE: PatentIn version 3.1
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 4706
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Rattus norvegicus
 27 <400> SEQUENCE: 1

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32	gtgccaaaca	atgaagccat	cgaaaactat	atcagggaga	agaaagccac	atctctaaag	180
34	gaagatattc	tacggtacca	tgtggtcctg	ggggaaaagc	tcctgaagaa	tgacttgcac	240
36	aacggcatgc	accgagagac	catgctgggg	ttctcctacc	tccttgccct	ctttctccgc	300
38	aatgaccagc	tgtatgtaaa	tgaagctcca	ataaactaca	ccaatgtggc	cactgataaa	360
40	ggagtgatcc	atggtctgga	gaaagttctg	gaaattcaga	agaacagatg	tgacaataat	420
42	gacaccatta	ttgtgagagg	ggagtgtgga	aagtgttccc	agcaagcccc	ctgcccactc	480
44	gagacaaaac	cacttagaga	gacgaggaaa	tgcattctatt	ccatctactt	catggggag	540
46	agatccgtat	tcacggtgtg	ccagccacag	tgtgtgagaa	ccatcattac	aagagcctgc	600
48	tggctggctt	ctttggccca	caatgccaa	cctgccccgg	gagaggtcaa	aatgtgtgct	660
50	ctgggaacgg	cttctgtctg	ggacggtgtg	aatggcactg	gcacgtgcca	gtgcgggctg	720
52	ggcttcaatg	ggacagcctg	tgaaacctgc	actgagggga	agtatggtat	ccactgcgac	780
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56	gactgtgacg	tcggctggcg	aggagtgaag	tgtgacatgg	agatcaccac	agacaactgc	900
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68	caggccgtct	gtaactgctt	gccgaagtac	actggagatg	gaaaggtctg	ctcgttatc	1260
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72	caagatcaaa	ggatatgtac	ctgcaagcca	gactacacgg	gtgatggaat	cgtctgccgg	1380
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78	tctagctcct	tcaatcatga	gccccggatt	aaagactggg	atcagcaggg	cctcatgtcc	1560
80	caggttcttc	gctatcacgt	ggtgggctgc	cagcagctgc	tgttgacaa	cctaaaagtg	1620
82	accacaagtg	ccacgaccct	ccaaggagag	ccagtttcca	tctctgtctc	tcaggacact	1680
84	gtgttcataa	acaatgaggc	gaaggtcctg	tccagtgaca	tcacagcac	caatggcgctc	1740
86	atccacgtta	tagacaagtt	gctgtctccc	aaaaacttgc	ttatcacccc	caaagatgcc	1800
88	ttgggcaggg	ttctgcaaaa	tcttactaca	gtggcagcaa	accacggata	taccaaattc	1860

ENTERED

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92 gtcactgtct tctggcctac ggacaaagcc ctggaagcct tgccccaga gcagcaggac 1980
94 ttcctgttca atcaagacaa caaggacaag ctgaagtcct acctgaagtt ccacgtgatc 2040
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98 ggctcagagc tgagtgtgag gtgtggaact ggcagtgaca tcggtgagct ctttctaacc 2160
100 gaacaaatgt gcagattcat acaccgggga ctcttggttg acgtgggtgt ggcctatggc 2220
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104 gatattccgg gggagtgcgg aagttgcatt ttcactccca aatgcccact gaagagcaag 2340
106 ccaaagggcg tgaagaagaa gtgtatctac aacccggttac ctttcaggag gaacgtggaa 2400
108 ggctgccaga acctgtgcac cgtgggtgatc caaaccccca ggtgctgcca tggttacttc 2460
110 atgccagact gtcaggcctg ccctggagga ccagatacac cgtgtaacaa ccggggcatg 2520
112 tgccgcgac tgtacacacc catgggacag tgcctatgcc acaccggctt caacgggaca 2580
114 gcctgcgagc tctgtcggca tgggagattt gggcctgact gtcagccccg cagctgctcc 2640
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128 catgagcacg ccacctgcag gatgacgggg ccaggcaagc ataagtgtga atgtaaaagt 3060
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184 ctatgaaagc aaaaaaaaaa aaaaaa 4706
187 <210> SEQ ID NO: 2

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188 <211> LENGTH: 1431
189 <212> TYPE: PRT
190 <213> ORGANISM: Rattus norvegicus
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198 Ile Phe Arg Gly Tyr Ile Ile His Tyr Asn Leu Ala Ser Ala Ile Glu
199 20 25 30
202 Ser Ala Asp Ala Tyr Thr Val Phe Val Pro Asn Asn Glu Ala Ile Glu
203 35 40 45
206 Asn Tyr Ile Arg Glu Lys Lys Ala Thr Ser Leu Lys Glu Asp Ile Leu
207 50 55 60
210 Arg Tyr His Val Val Leu Gly Glu Lys Leu Leu Lys Asn Asp Leu His
211 65 70 75 80
214 Asn Gly Met His Arg Glu Thr Met Leu Gly Phe Ser Tyr Leu Leu Ala
215 85 90 95
218 Phe Phe Leu Arg Asn Asp Gln Leu Tyr Val Asn Glu Ala Pro Ile Asn
219 100 105 110
222 Tyr Thr Asn Val Ala Thr Asp Lys Gly Val Ile His Gly Leu Glu Lys
223 115 120 125
226 Val Leu Glu Ile Gln Lys Asn Arg Cys Asp Asn Asn Asp Thr Ile Ile
227 130 135 140
230 Val Arg Gly Glu Cys Gly Lys Cys Ser Gln Gln Ala Pro Cys Pro Leu
231 145 150 155 160
234 Glu Thr Lys Pro Leu Arg Glu Thr Arg Lys Cys Ile Tyr Ser Ile Tyr
235 165 170 175
238 Phe Met Gly Lys Arg Ser Val Phe Ile Gly Cys Gln Pro Gln Cys Val
239 180 185 190
242 Arg Thr Ile Ile Thr Arg Ala Cys Trp Leu Ala Ser Leu Ala His Asn
243 195 200 205
246 Ala Lys Pro Ala Pro Gly Glu Val Lys Met Cys Ala Leu Gly Thr Ala
247 210 215 220
250 Ser Val Trp Asp Gly Val Asn Gly Thr Gly Thr Cys Gln Cys Gly Leu
251 225 230 235 240
254 Gly Phe Asn Gly Thr Ala Cys Glu Thr Cys Thr Glu Gly Lys Tyr Gly
255 245 250 255
258 Ile His Cys Asp Gln Ala Cys Ser Cys Val His Gly Arg Cys Ser Gln
259 260 265 270
262 Gly Pro Leu Gly Asp Gly Ser Cys Asp Cys Asp Val Gly Trp Arg Gly
263 275 280 285
266 Val Lys Cys Asp Met Glu Ile Thr Thr Asp Asn Cys Asn Gly Thr Cys
267 290 295 300
270 His Thr Ser Ala Asn Cys Leu Leu Asp Pro Asp Gly Lys Ala Ser Cys
271 305 310 315 320
274 Lys Cys Ala Ala Gly Phe Arg Gly Asn Gly Thr Val Cys Thr Ala Ile
275 325 330 335
278 Asn Ala Cys Glu Thr Ser Asn Gly Gly Cys Ser Thr Lys Ala Asp Cys
279 340 345 350
282 Lys Arg Thr Thr Pro Gly Asn Arg Val Cys Val Cys Lys Ala Gly Tyr

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283          355          360          365
286 Thr Gly Asp Gly Ile Val Cys Leu Glu Ile Asn Pro Cys Leu Glu Asn
287          370          375          380
290 His Gly Gly Cys Asp Arg Asn Ala Glu Cys Thr Gln Thr Gly Pro Asn
291 385          390          395          400
294 Gln Ala Val Cys Asn Cys Leu Pro Lys Tyr Thr Gly Asp Gly Lys Val
295          405          410          415
298 Cys Ser Leu Ile Asn Val Cys Leu Thr Asn Asn Gly Gly Cys Ser Pro
299          420          425          430
302 Phe Ala Phe Cys Asn Tyr Thr Glu Gln Asp Gln Arg Ile Cys Thr Cys
303          435          440          445
306 Lys Pro Asp Tyr Thr Gly Asp Gly Ile Val Cys Arg Gly Ser Ile Tyr
307          450          455          460
310 Gly Glu Leu Pro Lys Asn Pro Ser Thr Ser Gln Tyr Phe Phe Gln Leu
311 465          470          475          480
314 Gln Glu His Ala Val Arg Glu Leu Ala Gly Pro Gly Pro Phe Thr Val
315          485          490          495
318 Phe Ala Pro Leu Ser Ser Ser Phe Asn His Glu Pro Arg Ile Lys Asp
319          500          505          510
322 Trp Asp Gln Gln Gly Leu Met Ser Gln Val Leu Arg Tyr His Val Val
323          515          520          525
326 Gly Cys Gln Gln Leu Leu Leu Asp Asn Leu Lys Val Thr Thr Ser Ala
327          530          535          540
330 Thr Thr Leu Gln Gly Glu Pro Val Ser Ile Ser Val Ser Gln Asp Thr
331 545          550          555          560
334 Val Phe Ile Asn Asn Glu Ala Lys Val Leu Ser Ser Asp Ile Ile Ser
335          565          570          575
338 Thr Asn Gly Val Ile His Val Ile Asp Lys Leu Leu Ser Pro Lys Asn
339          580          585          590
342 Leu Leu Ile Thr Pro Lys Asp Ala Leu Gly Arg Val Leu Gln Asn Leu
343          595          600          605
346 Thr Thr Val Ala Ala Asn His Gly Tyr Thr Lys Phe Ser Lys Leu Ile
347          610          615          620
350 Gln Asp Ser Gly Leu Leu Ser Val Ile Thr Asp Ser Ile His Thr Pro
351 625          630          635          640
354 Val Thr Val Phe Trp Pro Thr Asp Lys Ala Leu Glu Ala Leu Pro Pro
355          645          650          655
358 Glu Gln Gln Asp Phe Leu Phe Asn Gln Asp Asn Lys Asp Lys Leu Lys
359          660          665          670
362 Ser Tyr Leu Lys Phe His Val Ile Arg Asp Ser Lys Ala Leu Ala Ser
363          675          680          685
366 Asp Leu Pro Arg Ser Ala Ser Trp Lys Thr Leu Gln Gly Ser Glu Leu
367          690          695          700
370 Ser Val Arg Cys Gly Thr Gly Ser Asp Ile Gly Glu Leu Phe Leu Asn
371 705          710          715          720
374 Glu Gln Met Cys Arg Phe Ile His Arg Gly Leu Leu Phe Asp Val Gly
375          725          730          735
378 Val Ala Tyr Gly Ile Asp Cys Leu Leu Met Asn Pro Thr Leu Gly Gly
379          740          745          750

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Output Set: N:\CRF3\09132001\I842930A.raw

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386 Cys Ile Phe Thr Pro Lys Cys Pro Leu Lys Ser Lys Pro Lys Gly Val
387          770          775          780
390 Lys Lys Lys Cys Ile Tyr Asn Pro Leu Pro Phe Arg Arg Asn Val Glu
391 785          790          795          800
394 Gly Cys Gln Asn Leu Cys Thr Val Val Ile Gln Thr Pro Arg Cys Cys
395          805          810          815
398 His Gly Tyr Phe Met Pro Asp Cys Gln Ala Cys Pro Gly Gly Pro Asp
399          820          825          830
402 Thr Pro Cys Asn Asn Arg Gly Met Cys Arg Asp Leu Tyr Thr Pro Met
403          835          840          845
406 Gly Gln Cys Leu Cys His Thr Gly Phe Asn Gly Thr Ala Cys Glu Leu
407          850          855          860
410 Cys Trp His Gly Arg Phe Gly Pro Asp Cys Gln Pro Arg Ser Cys Ser
411 865          870          875          880
414 Glu His Gly Gln Cys Asp Glu Gly Ile Thr Gly Ser Gly Glu Cys Leu
415          885          890          895
418 Cys Glu Thr Gly Trp Thr Ala Ala Ser Cys Asp Thr Pro Thr Ala Val
419          900          905          910
422 Phe Ala Val Cys Thr Pro Ala Cys Ser Val His Ala Thr Cys Thr Glu
423          915          920          925
426 Asn Asn Thr Cys Val Cys Asn Leu Asn Tyr Glu Gly Asp Gly Ile Thr
427          930          935          940
430 Cys Thr Val Val Asp Phe Cys Lys Gln Asn Asn Gly Gly Cys Ala Lys
431 945          950          955          960
434 Val Ala Lys Cys Ser Gln Lys Gly Thr Gln Val Ser Cys Ser Cys Lys
435          965          970          975
438 Lys Gly Tyr Lys Gly Asp Gly Tyr Ser Cys Ile Glu Ile Asp Pro Cys
439          980          985          990
442 Ala Asp Gly Val Asn Gly Gly Cys His Glu His Ala Thr Cys Arg Met
443          995          1000          1005
446 Thr Gly Pro Gly Lys His Lys Cys Glu Cys Lys Ser His Tyr Val
447          1010          1015          1020
450 Gly Asp Gly Val Asp Cys Glu Pro Glu Gln Leu Pro Leu Asp Arg
451          1025          1030          1035
454 Cys Leu Gln Asp Asn Gly Gln Cys His Pro Asp Ala Ser Cys Ala
455          1040          1045          1050
458 Asp Leu Tyr Phe Gln Asp Thr Thr Val Gly Val Phe His Leu Arg
459          1055          1060          1065
462 Ser Pro Leu Gly Gln Tyr Lys Leu Thr Phe Asp Lys Ala Lys Glu
463          1070          1075          1080
466 Ala Cys Ala Lys Glu Ala Ala Thr Ile Ala Thr Tyr Asn Gln Leu
467          1085          1090          1095
470 Ser Tyr Ala Gln Lys Ala Lys Tyr His Leu Cys Ser Ala Gly Trp
471          1100          1105          1110
474 Leu Glu Ser Gly Arg Val Ala Tyr Pro Thr Thr Tyr Ala Ser Gln
475          1115          1120          1125
478 Lys Cys Gly Ala Asn Val Val Gly Ile Val Asp Tyr Gly Ser Arg

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Use of n and / or Xaa has been detected in the
Sequence Listing. Review the Sequence Listing
to ensure a corresponding explanation is present
in the <220> to <223> fields of each sequence
using n or Xaa.

VERIFICATION SUMMARY

DATE: 09/13/2001

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Input Set : A:\sequence listing.txt

Output Set: N:\CRF3\09132001\I842930A.raw

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:785 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:824 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:863 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:1490 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40